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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,683

04/04/2006

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Huntington, NY 11743

03/30/2011

EXAMINER

FLORES SANCHEZ, OMAR

ART UNIT

PAPER NUMBER

3724

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,683	Applicant(s) BOHNE, ULRICH	
	Examiner Omar Flores-Sánchez	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10, 13-20, 22 and 24-33 is/are pending in the application.
- 4a) Of the above claim(s) 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 13-20, 22 and 24-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's amendment received on 08/04/10.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cup spring must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claim 27-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27 recites the limitation "chamfers". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 10, 13, 17-20, 22, 23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raines (5,366,312) and Winter (3,905,374).

Raines discloses (Fig. 1-20) the invention substantially as claimed including a centering element 22 has circular cross-section, a bearing flange (e.g., 14 or 24), a form-locking element/pin-like form (e.g., 84 and 85), a tool (Fig. 7-10), a power tool 10, a drive shaft 12, See Fig. 12 the radius associated with one position of the form-locking element is more than twice as large as a radius of the centering element, at least one slaving face (the outer surface of the boss), a recess (e.g., 34) with circumferential edge of 360 degrees and a diameter of 4-8 mm (inherently disclosed). Raines discloses the claimed invention except for a radius associated with one position or said form-locking element is four times as large as a radius of said centering element. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Raines by providing the a radius associated with one

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position or said form-locking element is eight times as large as a radius of said centering element for the purpose of having a better connection, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum value or workable ranges involves only routine skill in the art. In re Aller, 105USPQ 233.

Raines discloses the invention substantially as claimed except for at least twelve form-locking elements. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Raines by providing at least twelve form-locking elements for the purpose of increasing the degree of freedom of the blade, since it has been held that mere duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Raines discloses the invention substantially as claimed except a quadrangular cross section/trapezoidal cross section which is perpendicular to an axis of the shaft. However, Winter teaches the use of a locking element 19 having a trapezoidal cross section (see Fig. 2) which is perpendicular to an axis of the shaft for the purpose of providing a secure and stable engagement of the blade. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the locking element of Raines by providing the trapezoidal cross section as taught by Winter in order to obtain a device that provides a secure and stable engagement of the blade.

7. Claims 4-5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raines (5,366,312) in view of Trott (5,729,904).

The modified device of Raines discloses the invention substantially as claimed except for at least three or four rotary positions. However, Trott teaches the use of pins 32 for the purpose

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of connecting the blade. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Raines by providing the pins as taught by Trott in order to obtain a device that quickly connects the blade. Trott pins are capable of connecting the blade in at least three or four rotary positions.

8. Claims 6 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raines (5,366,312) in view of Trott (5,729,904) as set forth in claim 5.

The modified device of Raines discloses the invention substantially as claimed except for at least twelve rotary positions. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Raines by providing at least twelve rotary positions for the purpose of increasing the degree of freedom of the blade, since it has been held that mere duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. The locking element of Raines are capable of operate with tools having triple symmetry and a quadruple symmetry by locating the circular locking element resting in the side walls.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raines (5,366,312) in view of Hutchins et al. (5,694,693).

The modified device of Raines discloses the invention substantially as claimed except for at least one chamfer. However, Hutchins et al. teaches the use of at least one chamfer (see Fig. 5-6) for the purpose of easily securing the blade. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Raines

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by providing at least one chamfer as taught by Hutchins et al. in order to obtain a device that easily secures the blade.

10. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raines (5,366,312) in view of Jasch (6,796,888 B2).

The modified device of Raines discloses the invention substantially as claimed except for a spring element. However, Jasch teaches the use of a spring element 98 for the purpose of preventing a release of the screw in operation. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Raines by providing the spring element as taught by Jasch in order to obtain a device that prevents a release of the screw in operation.

11. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raines (5,366,312) as applied to claim 6 above.

The modified device of Raines discloses the claimed invention except for twelve rotary positions differ from each of their adjacent rotary positions by 30° . It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Raines by providing the twelve rotary positions differ from each of their adjacent rotary positions by 30° , since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum value or workable ranges involves only routine skill in the art. In re Aller, 105USPQ 233.

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12. Claims 27-29 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raines (5,366,312) in view of Jasch (6,796,888 B2), Winter (3,905,374) and Hutchins et al. (5,694,693).

Raines discloses the invention substantially as claimed including a centering element/fastening screw 22, a bearing flange (e.g., 14 or 24), at least one form-locking element (for example, 84 and 85), a tool (Fig. 7-10), a power tool 10 and a drive shaft 12. Raines doesn't show at least twelve rotary positions. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Raines by providing at least twelve rotary positions for the purpose of increasing the degree of freedom of the blade, since it has been held that mere duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. The locking element of Raines are capable of operate with tools having triple symmetry and a quadruple symmetry by locating the circular locking element resting in the side walls. Also, Raines discloses the claimed invention except for a radius associated with one position or said form-locking element is four times as large as a radius of said centering element. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Raines by providing the a radius associated with one position or said form-locking element is eight times as large as a radius of said centering element for the purpose of having a better connection, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum value or workable ranges involves only routine skill in the art. In re Aller, 105USPQ 233.

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Raines discloses the invention substantially as claimed except for a spring element. However, Jasch teaches the use of a spring element 98 for the purpose of preventing a release of the screw in operation. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Raines by providing the spring element as taught by Jasch in order to obtain a device that prevents a release of the screw in operation. The spring is capable of deflecting the tool past the chamfers. The spring element has a shape like a cup spring (see Fig. 16).

Raines discloses the invention substantially as claimed except a quadrangular cross section/trapezoidal cross section which is perpendicular to an axis of the shaft. However, Winter teaches the use of a locking element 19 having a trapezoidal cross section (see Fig. 2) which is perpendicular to an axis of the shaft for the purpose of providing a secure and stable engagement of the blade. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the locking element of Raines by providing the trapezoidal cross section as taught by Winter in order to obtain a device that provides a secure and stable engagement of the blade.

Raines discloses the invention substantially as claimed except for chamfers. However, Hutchins et al. teaches the use of chamfers (see Fig. 5-6) for the purpose of easily securing the blade. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Raines by providing chamfers as taught by Hutchins et al. in order to obtain a device that easily secures the blade.

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13. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raines (5,366,312) in view of Arnegger (4,252,121) and Winter (3,905,374).

Raines discloses the invention substantially as claimed including a centering element 22, form-locking elements (for example, 84 and 85), a tool (Fig. 7-10), a power tool 10 and a drive shaft 12. Raines doesn't show an inclined section. However, Arnegger teaches the use of a locking element 51 having an inclined section 52 (see Fig. 5) for the purpose of allowing certain cases a better accessibility to perform the cutting operation. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the locking element of Raines by providing the inclined section as taught by Arnegger in order to obtain a device that allows certain cases a better accessibility to perform the cutting operation.

Raines discloses the invention substantially as claimed except a quadrangular cross section/trapezoidal cross section which is perpendicular to an axis of the shaft. However, Winter teaches the use of a locking element 19 having a trapezoidal cross section (see Fig. 2) which is perpendicular to an axis of the shaft for the purpose of providing a secure and stable engagement of the blade. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the locking element of Raines by providing the trapezoidal cross section as taught by Winter in order to obtain a device that provides a secure and stable engagement of the blade.

14. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raines (5,366,312) in view of Arnegger (4,252,121) and Winter (3,905,374) as applied to claim 30 above, and further in view of Jasch (6,796,888 B2).

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The modified device of Raines discloses the invention substantially as claimed except for a spring element. However, Jasch teaches the use of a spring element 98 for the purpose of preventing a release of the screw in operation. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Raines by providing the spring element as taught by Jasch in order to obtain a device that prevents a release of the screw in operation.

Response to Arguments

15. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omar Flores-Sánchez whose telephone number is 571-272-4507. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/O. F./

Examiner, Art Unit 3724

3/25/2011

/Boyer D. Ashley/

Supervisory Patent Examiner, Art Unit 3724